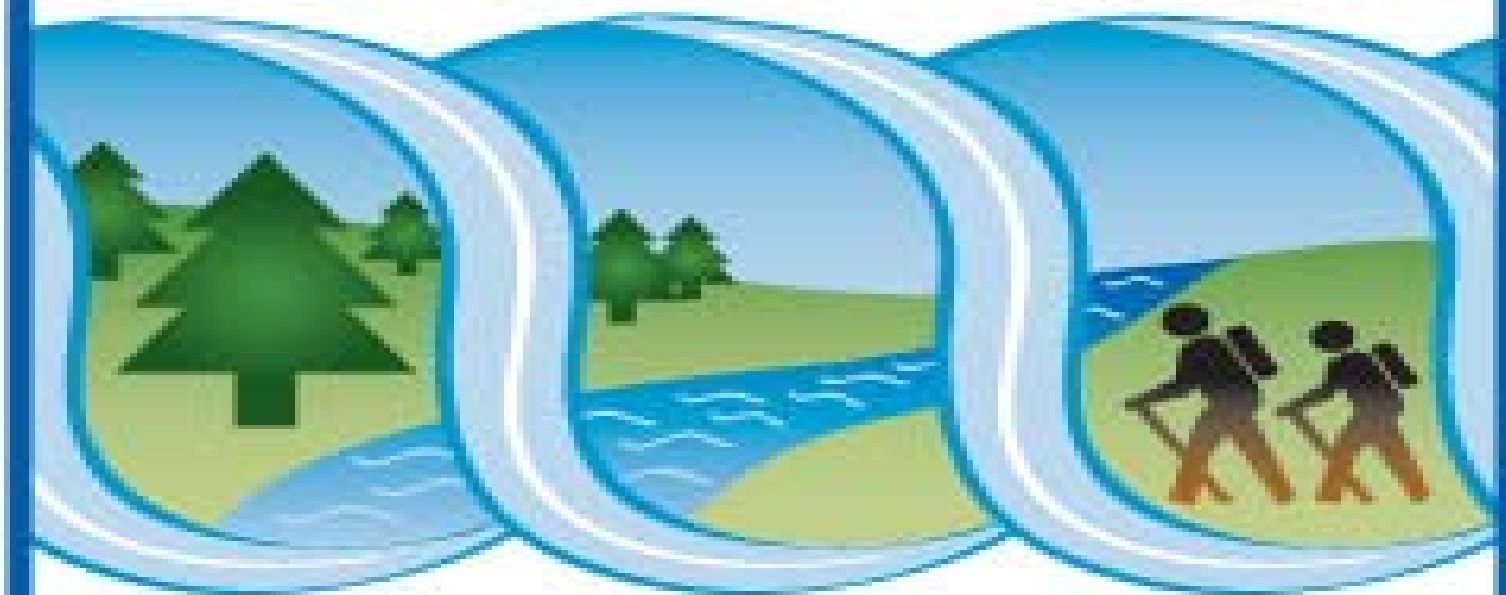
HELIX ATLANTA



Bridging Health & Environment

Health and Environment Linked for Information Exchange in Atlanta (HELIX-Atlanta)

Wednesday, April 20, 2005
10:00 a.m. - 11:30 a.m.

Amanda Sue Niskar, DrPH, RN

Science Development Team Leader

National Environmental Public Health Tracking Program

Centers for Disease Control & Prevention

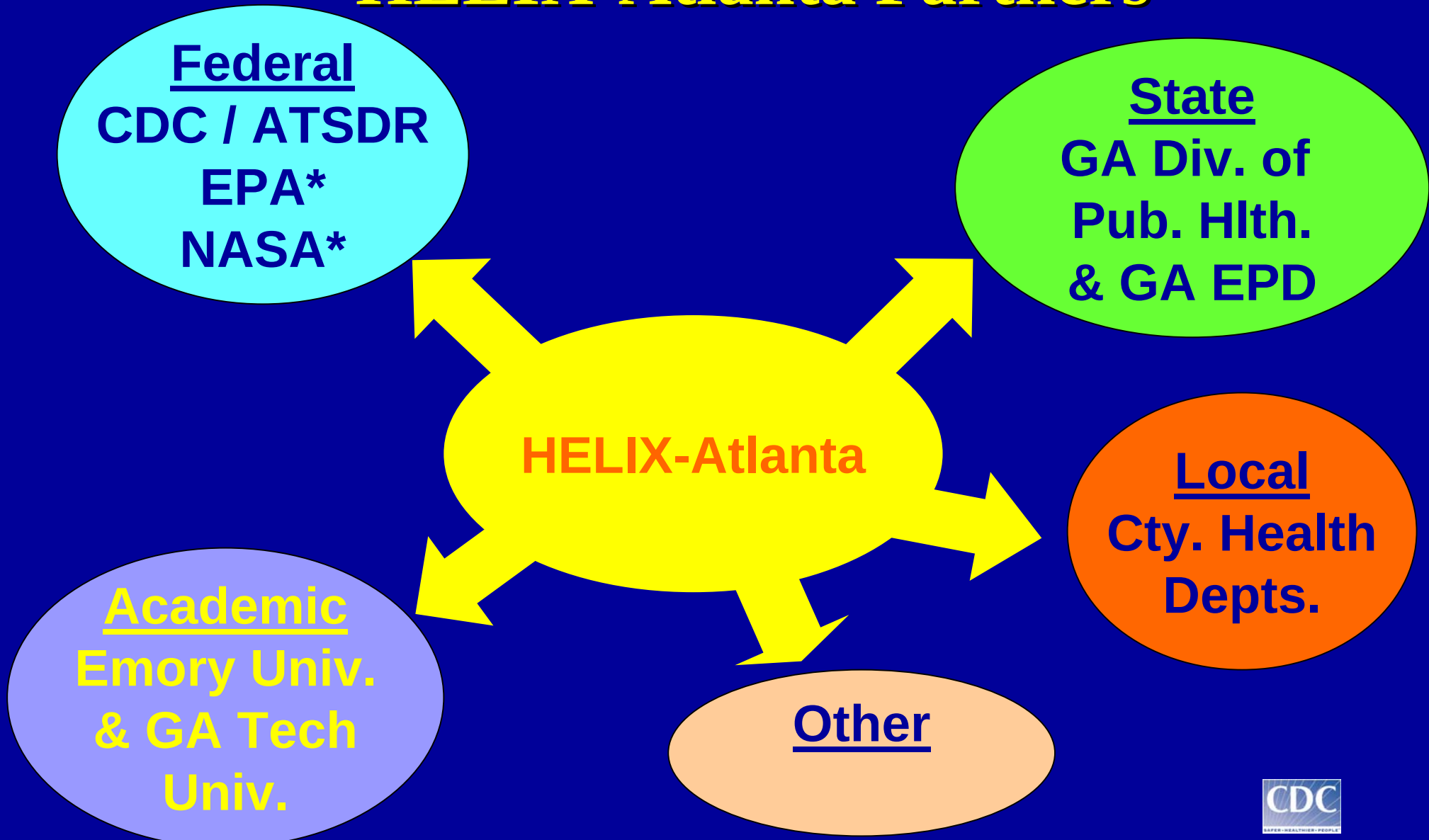
Today's Session Agenda

- 10:00 a.m.
  - Moderator Overview of HELIX-Atlanta
- 10:20 a.m.
  - Respiratory Health Team
- 10:45 a.m.
  - Birth Defects Team
- 11:10 a.m.
  - Discussion
- 11:30 a.m.
  - Adjourn

HELIX-Atlanta Location

- 5-county Metro-Atlanta Area
  - Clayton, Cobb, DeKalb, Fulton, & Gwinett

HELIX-Atlanta Partners



* Memorandums of Understanding (MOUs)

HELIX-Atlanta Focus for 2005

- Methods development for preparing health & environmental data for integration into a local environmental public health tracking network

HELIX-Atlanta Timeline

- October 2003: Initiate HELIX-Atlanta
- January 2004: Gather existing information system information
- April 2004: Select initial projects
- September 2004: Begin implementation
- January 2005: Discuss methodology
- May 2005: Complete initial projects & recommendations for next steps

Teams

1. Outreach
2. Water
3. Developmental Disabilities & Lead
4. Cancer
5. Respiratory Health
6. Birth Defects

Outreach Team

Goal:

To ensure clear, concise messages about HELIX-Atlanta are available to key audiences through appropriate communication products.

Methods:

- Contact stakeholders & other appropriate community & professional organizations
- Examine & determine information needs of selected target audience & identify possible communication channels
- Develop & test communication products embedded with approved EPHT core messages

Current Activities:

- Information kit
- Core messages
- Fact sheets
- Identify potential stakeholders & gathering contact information

Water Team Potential Measures

- Chemical contaminants to consider:
  - Disinfection Byproduct (DBP): turbidity>disinfection>DBP
  - Lead
- Potential health effects associated with these chemicals
  - DBP: bladder cancer, adverse reproductive & developmental effects
  - Lead: developmental disabilities

Water Team Data Sources

- Water quality monitoring data:
  - EPA; GA EPD; County
  - USGS water quality data
  - NASA Land-use change data
- Pb:
  - GA Dept. of Health (blood lead level)
  - GA EPD & County water quality monitoring data
- Adverse health effect data:
  - SEER Cancer Registry, MADDSP, MACDP

Water Team Next Steps

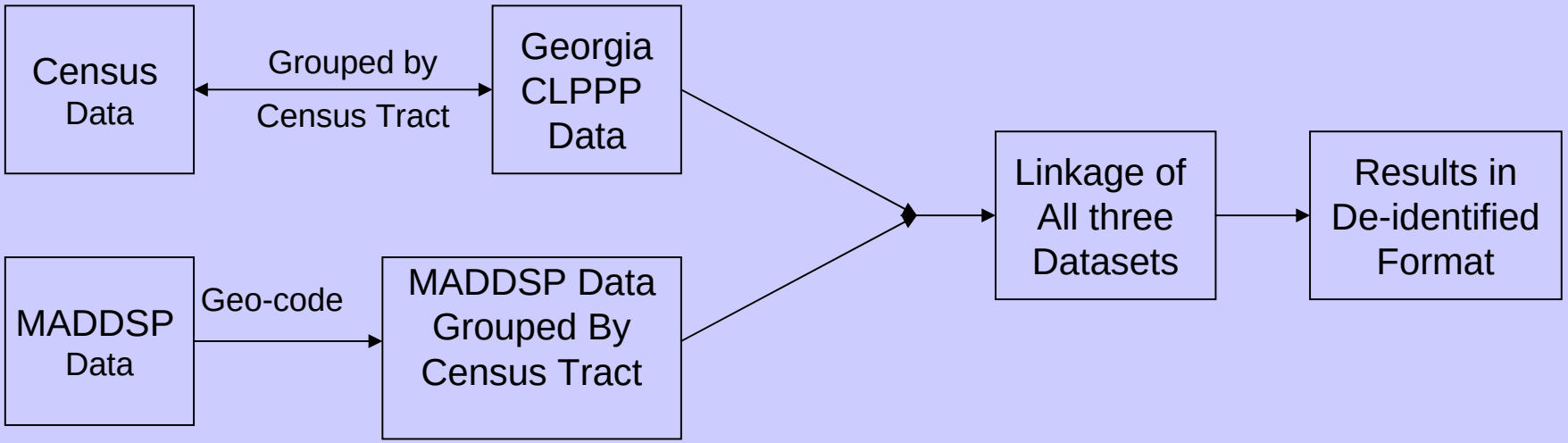
- Draft action plan
- Determine feasibility of integrating health & environmental data for water related adverse health effects
- Develop a report to highlight
  - Data gaps
  - Methodologies & tools for data linkage
  - Challenges & barriers to data access
  - Data quality & compatibility
- Evaluate project results & compare with other demonstration projects funded by EPHT

Developmental Disabilities & Lead Team

Datasets

- Georgia Childhood Lead Poisoning Prevention Program (GCLPPP)
  Georgia Division of Public Health
- Census Data (2000)
  www.census.gov
- Metropolitan Atlanta Developmental Disabilities Surveillance Program (MADDSP)
  National Center of Birth Defects and Developmental Disabilities

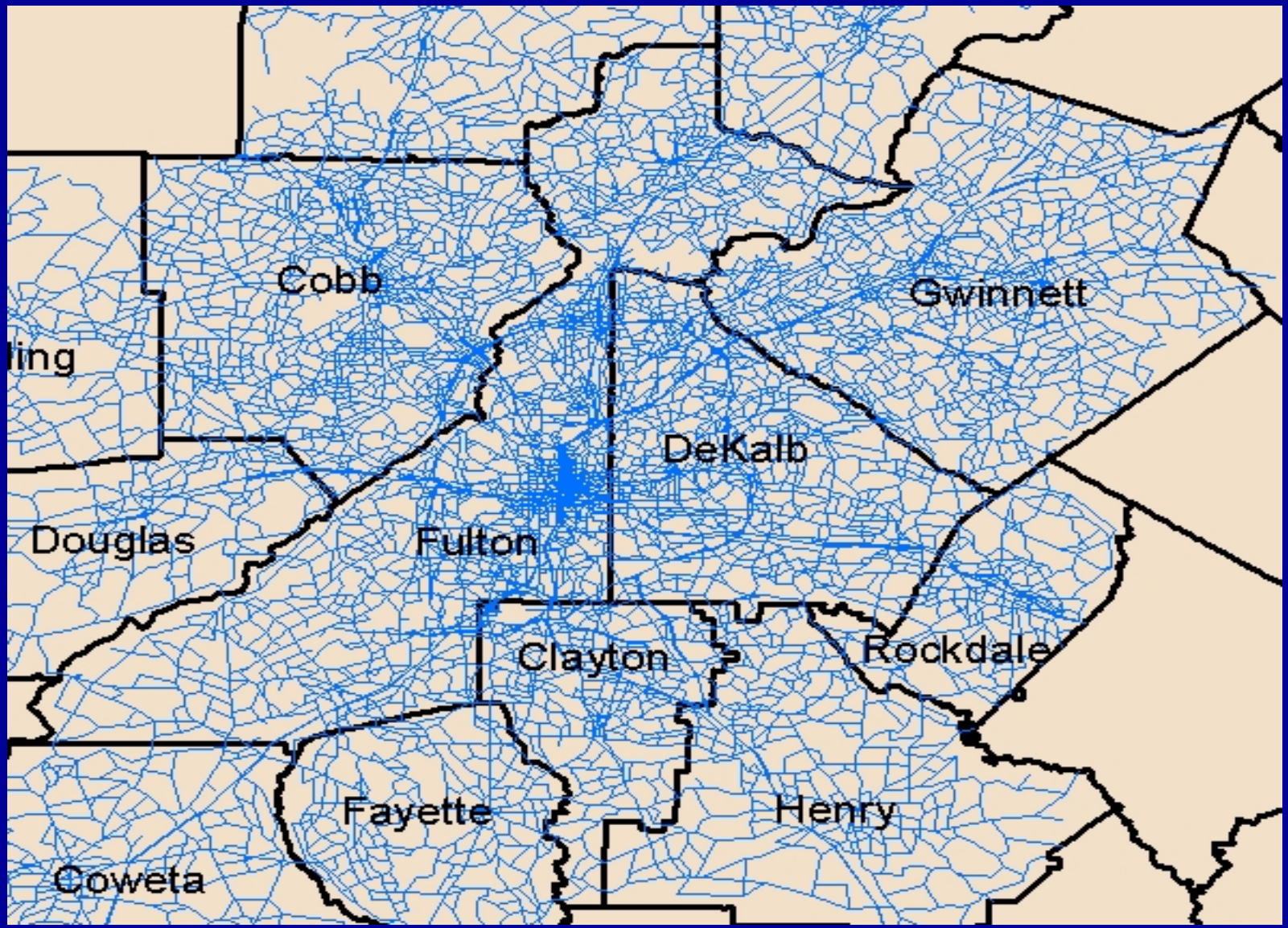
Analysis



Cancer Team

- **Selected Measures:**
  - *Health Effect:* Leukemia diagnosis < 5 years of age
    - Source: GA Comprehensive Cancer Registry
  - *Hazard:* Benzene & 1,3 Butadiene grams/mile of roadway section
    - Source: Georgia Environmental Protection Division MOBILE6.2 model (parameters: VMT, vehicle type, road type, & meteorological data)
    - 37,000 data points, 4 daily emission values
  - *Exposure Surrogates:* 4 methods of cumulative & average dose per census tract per year of potential lifetime exposure
    - conception to diagnosis
- Ecologic Analyses:
  - Temporal & spatio-temporal models
  - Exposure assignment comparisons

Metro Atlanta Roadways



Line=Segment

Each segment receives an emission value data point

37,000 segments = 37,000 data points in HELIX-Atlanta location

CDC

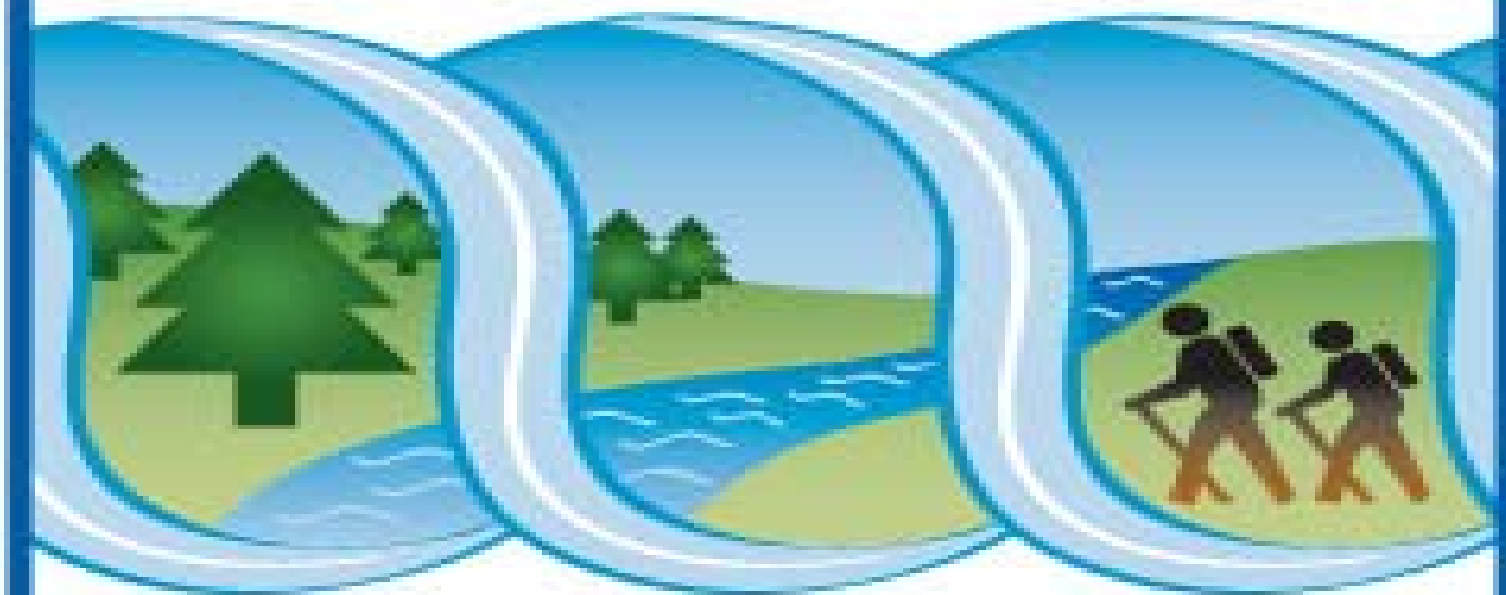
Contact Information

- **Amanda Sue Niskar**
  - **abn0@cdc.gov**
- **HELIX-Atlanta Website**
  - **www.cdc.gov/nceh/tracking/helix_overview.pdf**

Thank You!

- >100 multi-disciplinary individuals
- >20 programs

HELIX ATLANTA



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